EVIDENCE-BASED SAFE NURSE STAFFING TOOLKIT

Accessible content
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Evidence-based Safe Nurse Staffing

Introduction

I’m Anne Sutherland Boal, chief executive officer of the Canadian Nurses Association (CNA). And I am Linda Silas, president of the Canadian Federation of Nurses Unions (CFNU). Our two organizations have come together to create an evidence-based, safe nurse staffing toolkit.

Patient safety is a professional responsibility and a critical aspect of nursing care, as outlined in CNA’s Code of Ethics for Registered Nurses, entry to practice competencies and standards of practice.

Safe staffing begins with understanding the needs of the patient, assessing the evidence and working with the whole health team to determine who and how to best meet the needs of the patients, and determining the effectiveness of those staffing decisions.

This toolkit has been designed for direct care nurses and nurse managers. Many of the toolkit resources now are from the acute care setting. Over time, we’ll be adding more from other settings.

We invite you to start exploring the new toolkit today!

Thank you to our partners who helped initiate this toolkit: Accreditation Canada, Academy of Canadian Executive Nurses, Canadian Patient Safety Institute and Health Canada.

CNA and CFNU recognize that nurses work in a wide variety of care settings. Throughout this toolkit, we refer to care recipients mainly as patients, which we use interchangeably with clients, residents, families, groups and populations. We also refer to registered nurses as RNs, licensed or practical nurses as LPNs, nurse practitioners as NPs and clinical nurse specialists as CNSs.

This evidence-based safe nurse staffing toolkit contains four modules. Together, they help equip nurses and nurse managers with the knowledge, skills and tools to address patient safety issues and nursing practice gaps or concerns that result from unsafe nurse staffing practices.

Module 1 introduces you to the basics of safe nurse staffing and outlines how you as a nurse can improve outcomes for your patients and their families, and also for you and your workplace.
Module 2 explores the evidence that supports safe nurse staffing.

Module 3 offers tools that support safe nurse staffing.

Module 4 helps you build a case to influence decision-making on this topic.
Module 1

Welcome to Module 1. In this module you will be introduced to principles and components that are essential to safe nurse staffing. Upon completion, you will better understand how your role as a nurse can improve outcomes not only for patients and their families, but also for you and your workplace.

Are you concerned with patient safety in your work environment?

Are nurse staffing decisions affecting your ability to provide the best possible care and meet required nursing standards?

Do you know what your professional responsibility is in regard to nurse staffing and patient safety? This module will help you address these questions.

Section 1: What is evidence-based safe nurse staffing?

Well educated and trained nurses are a safe, clinically effective and cost efficient resource to manage the health needs of Canadians.

Nurse staffing is one of the few areas in health care in Canada where evidence is ignored in decision-making.

A considerable part of a health care facility’s budget is related to nursing, making it a vulnerable target during budget cuts.

Registered nursing services are an important investment that offer proven benefits for the cost.

What is evidence-based safe nurse staffing?

“Safe nurse staffing means that an appropriate number of nurses, and other staff, is available at all times across the continuum of care, with a suitable mix of education, skills and experience to ensure that patient care needs are met and that hazard-free working conditions are maintained.” (International Council of Nurses, 2013, p. 1)

Evidence-based staffing is defined as staff mix that is based on “information acquired through research and the scientific evaluation of practice [and] expert opinion in the form of consensus documents, commission reports, regulation and historical or experiential information.” (CNA, 2010, p. 1).

“Staff mix decision-making is optimized when it is based on outcomes, including patient safety and quality of care.”

(Harris & McGillis Hall, 2012, p. 26).
Safe staffing must be a guiding principle and a measureable outcome in health care. The following principles are necessary for making decisions about safe nurse staffing:

- Decisions must be based on the health-care needs of patients.
- Decisions must be based on the best evidence available and on best practices.
- Decisions must involve the direct care providers such as nurses.
- Decisions must be made with the support of information systems.
- The implementation of decisions must be sustained with support from the organization.
- Timely adjustments must be made according to changes in patients’ health-care needs.

Safe nurse staffing is made up of several components, namely:

- **A real-time assessment of patient needs.** This process evaluates patients’ health-care needs in the moment to determine a care plan.

- **Nursing care delivery models**, which are a system for organizing and delivering nursing care to patients and their families.

- **Staff mix decisions.** These are choices that respond to the patient’s health needs; support the continuity of care and care providers; value the quality of worklife; and optimize outcomes for patients, staff and organizations.

- **Workload measurement and its management** are ways to inform resource planning and decisions about patient care and staffing allocation.

- **Quality practice environments**, including occupational health and safety, maximize outcomes for patients, nurses and organizations.

- **Retention and recruitment**, which is the ability to attract sufficient staff to meet patients’ health-care needs.

**Section 2: What is your role as a nurse?**

When nurses promote evidence-based safe nurse staffing, they’re promoting patient safety.

Nurses have a professional obligation to promote patient safety through evidence-based safe nurse staffing. That obligation is grounded in codes of ethics, professional standards, employer policies and relevant legislation such as occupational health and safety acts. Visit your provincial/territorial regulatory body, union or government websites to access these documents.
Below are several examples of how the professional responsibility of nurses in promoting patient safety can be applied on the job.

**Stacey**

As a registered nurse in an obstetrical unit, the safety of mother and baby are paramount. As a professional, I have a responsibility to adhere to professional standards and best practices. For example, nursing clinical guidelines state that mothers in active labour must receive continuous one-to-one registered nursing care. This clinical guideline and others shape our unit’s practice, decisions, approach to staffing, and ensure high standards of care.

**Marj**

I’m a registered nurse and an associate director of care at a long-term care facility. As a member of the management team, I monitor resident safety indicators, including falls and medication errors. The entry-level competencies sent by my regulatory body state that I should use a systems approach to patient safety and participate in the prevention of errors and adverse events. A crucial step in this process is reviewing near-miss situations to determine where changes can be made to increase resident safety. I’m responsible for ensuring that regulated and unregulated staff at my facility have the knowledge and skills to ensure residents’ safety, and that we continue to develop a culture of quality and safety.

**Ricardo**

I care for people in the community every day who live in situations that pose a threat to their safety: risks like falling in their home, experiencing elder abuse or adverse drug reactions because they take from five to ten different medications. According to the professional standards set by my regulatory body, I have a responsibility to take appropriate actions in situations for my client’s safety and well-being is potentially or actually compromised. This means I am continually assessing actual and potential threats to my client’s safety, as well as planning and implementing appropriate measures to address these threats.
Section 3: Test your Knowledge

Questions

1. According to CNA’s Code of Ethics for Registered Nurses, RNs are obligated to address safe nurse staffing in their practice environments. Which of the following nursing values does this obligation relate to? (check all that apply)
   (a) Providing safe, compassionate competent and ethical care
   (b) Maintaining privacy and confidentiality
   (c) Promoting justice
   (d) Promoting and respecting informed decision-making

2. Which of the following are principles of evidence-based safe nurse staffing? (check all that apply)
   (a) Nurse managers alone are involved in staff mix decision-making
   (b) Quality practice environments
   (c) Management of workload measurement
   (d) Staff mix decisions are supported by information systems

3. True or False
   (a) Educating nurses on rights and obligations of workplace safety will positively affect safe patient care.
   (b) Clinical guidelines and professional standards for RN practice direct nurses to advocate for safe nurse staffing policies.
   (c) Direct care nurses should be involved in safe nurse staffing decisions because they are aware of patients' health-care needs.
   (d) Staff mix decision-making is not related to outcomes.

Answers

   a) and d)
   d)
   a) true
   b) true
c) true
d) false

Conclusion
Thank you for putting your patients first by taking the time to learn more about safe nurse staffing.


Visit http://cna.fluidsurveys.com/s/staffingtoolkitmodule1/ to complete a short survey so we can continue to improve this toolkit.

Module 1 Resources
A webpage with links to a surgical safety checklist and related resources.

Safer Healthcare Now: http://www.saferhealthcarenow.ca/EN/Pages/default.aspx A webpage highlighting the Canadian Patient Safety Institute’s flagship program to raise awareness and implement best practices in patient safety.


The Value of Registered Nurses [English only]: https://www.cna-aiic.ca/~/media/cna/page-content/pdf-en/roi_value_of_nurses_fs_e.pdf?la=en This fact sheet provides information on the value of RNs in saving lives, promoting health and reducing costs.

Development and Evaluation of an RN/RPN Utilization Toolkit [English only]: http://www.longwoods.com/content/21733 An online article that reviews staff mix decision-making based on the College of Nurses of Ontario’s practice standard for the utilization of RNs and RPNs.

Staff Mix Decision-making Framework for Quality Nursing Care [English only]: http://cna-aiic.ca/~/media/cna/page-content/pdf-en/staff_mix_framework_2012_e.pdf This PDF document provides a systematic approach to nursing staff mix decision-making that can be used in all clinical practice settings.
Canadian Nurses Association: http://www.cna-aiic.ca/en - http://www.nurseone.ca/en/knowledge-features/staff-mix This website provides an overview of nursing staff mix and links to other resources.

RN Code of Ethics [English only]: http://www.cna-aiic.ca/~/media/can/files/en/codeofethics.pdf This PDF document serves as a foundation for the ethical practice of RNs.

RN Code of Ethics in QC only: http://www2.publicationsduquebec.gouv.qc.ca/dynamichome/telecharge.php?type=3&file=/I_8/I8R9.HTM This website discusses the RN code of ethics within the province of Quebec.

Code of Ethics for LPNs in Canada [English only]: http://www.ccpnr.ca/wp-content/uploads/2013/09/IJLPN-CE-Final.pdf This PDF document discusses the ethical values and responsibilities that LPNs uphold and promote, and to which they are accountable.

Nursing Workload and Patient Care: https://nursesunions.ca/report-study/nursing-workload-and-patient-care A web page from CFNU with links to the (Berry and Curry) report examining nursing workload and its impact on patient care.


Module 1 References


Module 2

This module explores the evidence that supports safe nurse staffing.

Adverse events result in unintended harm to the patient and are related to the care and/or services provided rather than to the patient’s underlying medical condition.

Did you know

- that 1 out of 13 adult patients admitted to a Canadian hospital experiences an adverse event?
- that between 9,000 and 24,000 patients die each year in Canadian hospitals as a result of adverse events?
- that in 2009 and 2010, the cost of preventable adverse events in Canada was $397 million dollars?
- and that more than a third adverse events are highly preventable?

*(Baker et al., 2004; Etchells et al., n.d.)*

Did you know that there is a clear link between nurse staffing and adverse events?

Evidence-based nurse staffing is simple in concept but a challenge in practice. It means the right number of nurses with the right skills, education and experience are available at all times, so that patients’ needs are met. This requires a quality practice environment to support nurses in providing the best possible care.

Section 1: Research-based Outcomes of Safe Nurse Staffing

This module provides evidence on nurse staffing practices that will maximize patient, nurse and organizational outcomes to ensure patient safety.

Nurse staffing impacts the patient, the nurse and the employer. Take this fun quiz to see what you already know on this topic.

Questions

Patient Outcomes

Identify the evidence-based patient outcomes of implementing safe nurse staffing practices.

(a) Fewer errors

(b) Fewer readmissions
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(c) Happier patients
(d) Increased falls
(e) High quality of care
(f) Fewer incidents
(g) Fewer infections
(h) More adverse events
(i) More heart attacks
(j) Increased deaths
(k) More home visits
(l) More urinary tract infections

Nurse Outcomes
Identify the evidence-based nurse outcomes of implementing safe nurse staffing practices.

(a) Less staff turnover
(b) Less overtime
(c) Higher salaries
(d) Fewer sick days
(e) Faster promotions
(f) Less staff commitment
(g) Longer hours
(h) Less fatigue
(i) Higher job satisfaction
(j) Less stress
(k) Less work
(l) More errors

Employer Outcomes
Identify the evidence-based employer/organization outcomes of implementing safe nurse staffing practices.
(a) Fewer errors
(b) Fewer readmissions
(c) Shorter shifts
(d) Reduced costs
(e) Shorter stays
(f) Higher retention rates
(g) Increased profit
(h) More errors
(i) Reduced safety
(j) Less overtime
(k) More sick leave
(l) Higher staff turnover

Answers

<table>
<thead>
<tr>
<th>Patient Outcomes: a, b, c, e, f, g</th>
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<tbody>
<tr>
<td><strong>Fact:</strong></td>
</tr>
<tr>
<td>Fewer errors</td>
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<tr>
<td>Nurses working over 12.5 hours is linked to medication administration errors, (Rogers et al., 2004).</td>
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<tr>
<td><strong>Fact:</strong></td>
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<tr>
<td>Fewer readmissions</td>
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<tr>
<td>Evidence continues to show that improving nurse staffing lowers readmissions. One study associated a 45% reduction in the odds of an unplanned ER visit after discharge with an increase in RN hours per patient day of 0.71 hours (Bobay, Yakusheva, &amp; Weiss, 2011).</td>
</tr>
<tr>
<td><strong>Fact:</strong></td>
</tr>
<tr>
<td>Happier patients</td>
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<tr>
<td>Findings from a study on nursing care and clinical outcomes included increased satisfaction among patients when more RNs and RPNs were part of the staff mix (McGillis Hall et al., 2004).</td>
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<tr>
<td><strong>Fiction:</strong></td>
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<tr>
<td>Increased falls</td>
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<td>This statement is not supported by evidence.</td>
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<td>In fact, “using administrative data from 799 hospitals in 11 states, Needleman et al. (2002), established clear relationships between nurse staffing and mortality rates,” including falls (Berry &amp; Curry, 2012, p. 27).</td>
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### Patient Outcomes: a, b, c, e, f, g

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<th>Fiction:</th>
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<td><strong>High quality of care</strong>&lt;br&gt;Studies have specifically linked the increase of RN staffing levels with improved quality of care (e.g., Castle &amp; Engberg, 2007; Kim, Harrington, &amp; Greene, 2009).</td>
<td><strong>Fewer incidents</strong>&lt;br&gt;“In hospitals with high patient-to-nurse ratios, surgical patients experience higher risk-adjusted 30-day mortality and failure-to-rescue rates” (Aiken, Clarke, Sloane, Sochalski, &amp; Silber, 2002, p. 1987).&lt;br&gt;In fact, the opposite is true. There is a “proven link between increased nurse staffing and length of stay, readmission, patient morbidity, medication error and nurse turnover. Looking beyond the walls of health facilities, the savings for society at large through increased productivity are much, much greater than increased staffing costs” (Berry &amp; Curry, 2012, p. 16).</td>
<td><strong>Fewer infections</strong>&lt;br&gt;A study of a patient care delivery model in two provinces found that patient health was less likely to improve as nurses worked more overtime hours (Meyer, Wang, Li, Thomson, &amp; O’Brien-Pallas, 2009).&lt;br&gt;In fact, the opposite is true. There is a “proven link between increased nurse staffing and length of stay, readmission, patient morbidity, medication error and nurse turnover. Looking beyond the walls of health facilities, the savings for society at large through increased productivity are much, much greater than increased staffing costs” (Berry &amp; Curry, 2012, p. 16).</td>
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<td><strong>More adverse events</strong>&lt;br&gt;This statement is not supported by evidence.</td>
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### Evidence-based Safe Nurse Staffing Toolkit: Accessible content

#### Patient Outcomes: a, b, c, e, f, g

<table>
<thead>
<tr>
<th>Fiction: More heart attacks</th>
<th>Fiction: Increased deaths</th>
<th>Fiction: More home visits</th>
<th>Fiction: More UTIs</th>
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<tr>
<td>This statement is not supported by evidence.</td>
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Studies show that higher RN staffing levels can reduce hospital costs by improving patient outcomes such as decreased rates of pressure ulcers, urinary tract infections and length of stay (e.g., Dorr, Horn, & Smout, 2005; Thungjaroenkul, Cummings, & Embleton, 2007; Titler et al., 2007).

#### Nurse Outcomes: a, b, d, h, l, j

<table>
<thead>
<tr>
<th>Fact: Less staff turnover</th>
<th>Fact: Fewer sick days</th>
<th>Fiction: Longer hours</th>
<th>Fact: Less stress</th>
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<tr>
<td>“Healthcare organizations that have made greater investments in their nursing human capital</td>
<td>In a systematic review of studies from 1986-2006, potential predictors of</td>
<td>This statement is not supported by evidence.</td>
<td>In a systematic review of studies from 1986-2006, potential predictors of nurse</td>
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**Nurse Outcomes: a, b, d, h, l, j**

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<tr>
<td>Nurse outcomes: a, b, d, h, l, j are more likely to demonstrate lower levels of turnover of their registered nursing personnel&quot; (Rondeau, Williams, &amp; Wagar, 2009, p. 739).</td>
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“A recent Canadian study on turnover found that the mean turnover rate in the 41 hospitals surveyed was 19.9%. Higher turnover was associated with lower job satisfaction (Berry & Curry, 2012, p. 35). Nurse absenteeism were examined. Findings showed that job satisfaction, organizational commitment, and work/job involvement reduced nurse absenteeism, whereas burnout and job stress increased it (Davey, Cummings, Newburn-Cook, & Lo, 2009). |

<table>
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<tr>
<th>Fact:</th>
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<tr>
<td><strong>Less overtime</strong></td>
<td><strong>Faster promotions</strong></td>
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<tr>
<td>Hospital staffing costs from adding extra nurses to increase nursing hours and reduce overtime are offset by having fewer return visits (Bobay, Yakusheva, &amp; Weiss, 2011).</td>
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<th>Fact:</th>
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<tr>
<td><strong>Less fatigue</strong></td>
<td><strong>Less work</strong></td>
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<tr>
<td>In a systematic review of studies from 1986-2006, potential predictors of nurse absenteeism were examined. Findings showed that job satisfaction, organizational commitment, and work/job involvement reduced nurse absenteeism, whereas burnout and job stress increased it (Davey, Cummings, Newburn-Cook, &amp; Lo, 2009).</td>
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<tr>
<td>This statement is not supported by evidence.</td>
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<td>“Nurses’ perceptions of empowerment, supervisor incivility, and cynicism [are] strongly related to job satisfaction, organizational commitment, and turnover intentions” (Spence Laschinger, Leiter, Day, &amp; Gilin, 2009, p. 302).</td>
<td>This statement is not supported by evidence.</td>
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<td></td>
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<td></td>
<td>In fact, the opposite is true. There is a “proven link between increased nurse staffing and length of stay, readmission, patient morbidity, medication error and nurse turnover. Looking beyond the walls of health facilities, the savings for society at large through increased productivity are much, much greater than increased staffing costs” (Berry &amp; Curry, 2012, p. 16).</td>
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### Employer Outcomes: a, b, d, e, f, j

<table>
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<tr>
<th>Fact: Fewer errors</th>
<th>Fact: Fewer readmissions</th>
<th>Fiction: Shorter shifts</th>
<th>Fact: Reduced costs</th>
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<tr>
<td>Fewer errors</td>
<td>Studies continue to show that improving nurse staffing reduces the incidence of readmission. An increase of 0.71 hours in RN hours per patient day is associated with 45% lower odds of an unplanned emergency room (ER) visit after discharge. (Bobay, Yakusheva, &amp; Weiss, 2011).</td>
<td>This statement is not supported by evidence.</td>
<td>“Studies have now emerged demonstrating that higher RN staffing levels have the potential to reduce hospital costs through improved patient outcomes, such as decreased rates of pressure ulcers, UTIs and LOS.” (Dorr, Horn, &amp; Smout, 2005; Thungjaroenkul, Cummings, &amp; Embleton, 2007; Titler et al., 2007).</td>
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<tr>
<th>Fact: Fewer readmissions</th>
<th>Fiction: Shorter shifts</th>
<th>Fiction: Increased profit</th>
<th>Fiction: More errors</th>
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<td>Fewer readmissions</td>
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In fact, a systematic review of 26 critical care studies found that nearly all associated decreased staffing in intensive care units with an increase in adverse events (Penoyer, 2010).

"Among medical patients, a higher proportion of hours of care per day provided by RNs and a greater absolute number of hours of care per day lead to improved patient care, better nurse retention (Aiken, Buchan, Ball, & Rafferty, 2008) and lower nurse turnover."

Fact: Shorter stays

Fact: High retention rates

"In hospitals, better work environments and good professional nursing practice [i.e., safe nurse staffing] lead to improved patient care, better nurse retention and lower nurse turnover."
<table>
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<th>Employer Outcomes: a, b, d, e, f, j</th>
<th>provided by RNs were associated with a shorter length of stay” (Needleman, Buerhaus, Mattke, Stewart, &amp; Zelevinsky, 2002, p. 1715).</th>
<th>rates (Mark, Salyer, &amp; Wan, 2003).</th>
<th>medication error and nurse turnover. Looking beyond the walls of health facilities, the savings for society at large through increased productivity are much, much greater than increased staffing costs” (Berry &amp; Curry, 2012, p. 16).</th>
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<tr>
<td>Fiction: Reduced safety</td>
<td>Fact: <strong>Less overtime</strong> Hospital staffing costs from adding extra nurses to increase nursing hours and reduce overtime are offset by having fewer return visits (Bobay, Yakusheva, &amp; Weiss, 2011). Research shows the consistently high costs of nurse turnover: ranging from an average of $25,000 per nurse (O'Brien-Pallas, Tomblin Murphy,</td>
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<tr>
<td>Fiction: More sick leave</td>
<td>Fiction: <strong>More sick leave</strong> This statement is not supported by evidence. When nurse staffing is not evidence-based, nurses take more sick leave. Although nurses experience higher rates of absenteeism and injury than other types of workers, Canadian governments have only just started to focus on its possible reasons (Shamian, O'Brien-Pallas, Thomson, Alksnis, &amp; Kerr, 2003).</td>
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<tr>
<td>Fiction: Higher staff turnover</td>
<td>Fiction: <strong>Higher staff turnover</strong> This statement is not supported by evidence. In fact, the opposite is true. There is a “proven link between increased nurse staffing and length of stay, readmission, patient morbidity, medication error and nurse turnover. Looking beyond the walls of health facilities, the</td>
<td></td>
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<tr>
<td>Employer Outcomes: a, b, d, e, f, j</td>
<td>Shamian, Li, &amp; Hayes, 2010) to between $21,514 and $67,100 per nurse (Tschannen, Kalisch, &amp; Lee, 2010).</td>
<td>savings for society at large through increased productivity are much, much greater than increased staffing costs&quot; (Berry &amp; Curry, 2012, p. 16).</td>
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Section 2: Real Stories About Real Outcomes

Below are seven real-life stories that show how adverse patient, nurse and employer outcomes can result from the absence of safe nurse staffing. Solutions to each of these stories will be presented in Module 3.

Scenario Number One: Nursing Home

I was working at a nursing home with 50 beds, staffed with one RN and a few personal support workers on a 24/7 basis. As the RN, I felt totally accountable for the care of all the residents. Many of them were very complex cases and had multiple chronic conditions and were on a lot of medications. Some had dementia. There were a lot of falls and all we could do was send them to the ER. I felt overwhelmed by the responsibility of all these patients. I care about them and I wanted to give them the very best care possible, but I was so rushed that I didn’t always have time to spend with them. Especially since I often had to provide support, supervise and monitor the work of the Personal Support Workers. That was frustrating. I was really worried that something would happen, and as the only RN, I was accountable and would be held liable.

Scenario Number Two: Acute Care

I was the RN in an OR stand-by team made up of myself and an LPN. The employer decided to cut the Endoscopy Unit hours – or Endo as we called it – so we were required to provide coverage for after-hours Endo Procedures with no anesthesiologist to cover. I was supposed to monitor the sedated patient and circulate. I knew this wasn’t right. In fact, it was potentially dangerous. The Operating Room Nurses Association of Canada standard says that when I’m monitoring a patient who has received conscious sedation, I can’t leave them or have any other duties that would interfere with continuous monitoring. I knew that patient safety was being compromised and that if anything happened when they were unattended, I would be held accountable. Plus, I hadn’t even been given the proper training in Endo procedures. I was so worried.

Scenario Number Three: Medical Unit

I was working as an RN in an acute care hospital medical unit. There was never enough staff - not even core staffing. When someone was sick, mostly we couldn’t replace them. The evenings and nights were the worst. If you were short a person, you were always running around, feeling like you couldn’t keep up. Because other areas of the hospital didn’t have enough staffing either, sometimes we’d be off the ward, moving patients, getting food trays, and going out to buy meds since the pharmacy wasn’t open. We even had to find our own replacements if someone called in sick. And nurses were getting sick all the time - we were so stressed, and working so much overtime. I was worried about medication errors, my meds were always given late and there was the
potential for overlooked infections. Infection rates on the ward were up, patients weren’t recovering as quickly as they should, and some patients were going home, only to return to the ward with complications.

**Scenario Number Four: Continuing Care**

I was working as an RN in a Post-Acute Care Unit. Most of our patients were elderly. They were very medically fragile, complex cases that needed a lot of support and a lot of hands-on care. Some suffered from dementia. Falls and unexpected infections were common. There was always the potential for bedsores and so patients needed to be moved regularly. With complex multiple conditions, administering medications required care and attention. A new model of care was introduced in the unit. It was called collaborative care, but soon it became apparent that it meant cuts to half of the regulated care providers – RNs and Licensed Practical Nurses – and replacing them with unregulated care providers. The unit also relied heavily on outside agencies. Right away, patient care began to suffer. There was no continuity of care. The unregulated care providers didn’t have sufficient knowledge, judgment or training. As the RN, and often the only RN on the core schedule, I felt completely accountable for the health outcomes of my patients.

**Scenario Number Five: Emergency Department**

I was working in an Emergency Department. You know how things can get so hectic in an ER. It’s hard to plan ahead to make sure you have the right staffing. Mind you, in my ER – it’s in the middle of a busy city – you can always pretty much assume that things will be busy. We didn’t have enough core staffing to begin with so often we weren’t able to take our breaks without leaving the ER short-staffed. Vacations, stats and sick days weren’t planned for. When LPNs became more common in the ER, it wasn’t made clear to anyone what they could and could not do. This situation – where RNs and LPNs roles and responsibilities were blurred – was made even worse by the fact that it wasn’t always clear who would care for the patient - who was accountable for their care. The nature of our ER was that the next patient in the next chair or bed went to the next nurse regardless of how sick they were or if it were an RN or LPN. Plus, we didn’t have all the training we needed – few of us were trained in how to do triage. All of this means that we were very stressed, patients were waiting much longer than they should have, and we were very afraid that, without the proper training, someone might be overlooked. A scary situation.

**Scenario Number Six: Nurse Manager, Intensive Care Unit**

I’m a nurse manager in a busy 30-bed ICU. There’s 28 RNs on each day and night. One is the clinical leader and the other 27 care for the patients. Twenty-four patients receive
one-on-one care and 3 RNs have 2 patients each. I’m always looking at the unit’s performance and efficiency reports because there’s a big push to do more and better with less money. The medical chief and I regularly look at the specific ICU quality indicators: infections, including ventilators associated with pneumonia (VAP), catheter-related bloodstream infections (CRBSI), patient deaths, early discharges, average lengths of stay, delayed or refused admission to the ICU, elective surgeries cancelled due to a lack of ICU beds, etc. This time, I noticed an increase in almost all of them – the numbers for average length of stay, early discharges, cancelled elective surgeries, and refused admissions were 30% higher for the past 4 months compared to the previous 4 months. We were always running at a 100% occupancy rate or we couldn’t admit patients because we lacked RNs to staff the beds. At the same time, RN overtime rates were 30% higher for the past 3 months. Nurses said they were tired and the number of sick days was up. To make a long story short, patients requiring critical care services weren’t getting them, the health and morale of nurses was deteriorating and costs were simultaneously going up. Something had to be done.

Scenario Number Seven: Nurse Manager, Long-Term Care

I am the Director of Care of a 195 bed long-term care facility. I’ve been directed to review the staff mix in my facility for residents, who, overall, have stable, chronic conditions. Our government has reduced its long-term care funding in the past year. We were told that our province had one of the highest nursing staff mixes in Canada, with 30% RNs, 70% Licensed Practical Nurses and no Unregulated Care Providers, which meant one of the highest costs-per-resident. When the roles and responsibilities of RNs and LPNs in our province were compared with their peers in other parts of Canada, it was found that our RNs were responsible for activities that LPNs were handling elsewhere and that LPNs were performing activities done by unregulated care providers elsewhere. I needed to take advantage of the potential full scopes of practice of RNs and LPNs by matching patient needs with nurses’ education, competencies and experience. So I have been asked to find ways to increase efficiencies and cost-effectiveness in order to reduce costs, while ensuring safe care for residents.

Nurses need to be able to provide the right care at the right time, in a safe and ethical manner. This is fundamental for the well-being of Canadians. Following evidence-based safe nurse staffing benefits the patient for better health outcomes, which also reduces the cost to the health system and provides nurses with better job satisfaction, which in turn benefits employers with reduced absenteeism and reduced costs.
Section 3: Test Your Knowledge

Questions

True or False?

1. There are three types of outcomes to consider when thinking of evidence-based safe nurse staffing: (1) patient, (2) nurse and (3) employer.

2. A higher proportion of RNs leads to decreased patient mortality rates.

3. As RN staffing levels increase, the risk of hospital-acquired infections increases.

4. A higher staffing proportion of unregulated care workers leads to decreased patient falls.

5. Increased RN staffing is associated with a higher risk of failure to rescue in surgical patients.

6. High workload levels can lead to nurse stress, burnout, fatigue, turnover and absenteeism.

7. Educating nurses on the evidence regarding nurse staffing and patient safety can positively impact safe patient care.

8. It is not necessary for nurse staffing decisions to be linked to improved outcomes for patients.

9. A higher proportion of RNs reduces hospital costs through reduced lengths of stay, fewer readmissions and preventable adverse events.

10. When a higher proportion of RNs is in place, the likelihood of medication errors is reduced.

Answers

1. True

2. True

3. False

4. False

5. False

6. True
7. True
8. False
9. True
10. True

Conclusion

Thank you for putting your patients first by learning more about how evidence-based nurse staffing leads to positive patient, nurse and employer outcomes.


Visit [http://cna.fluidsurveys.com/s/staffingtoolkitmodule2/](http://cna.fluidsurveys.com/s/staffingtoolkitmodule2/) to complete a short survey so we can continue to improve this toolkit.

Module 2 Resources

Patient Safety

_Canadian Adverse Events Study_. An online journal article on the incidence of adverse events among patients in Canadian hospitals. [English only]

Canadian Patient Safety Institute [web page](http://www.cpsinet.org/) with links to a surgical safety checklist and related resources.

Economics of Patient Safety [web page](http://www.cpsinet.org/) from the Canadian Patient Safety Institute with access to research results and other support materials.

Quality and Safety in Patient Care [web page](http://www.cpsinet.org/) from CNA that links to a report from a 2014 roundtable, involving many partners (funded by Health Canada), on expanding the culture of quality and safety in the Canadian health-care system.

Safer Healthcare Now [web page](http://www.cpsinet.org/) highlighting the Canadian Patient Safety Institute’s flagship program to raise awareness and implement best practices in patient safety.

Nursing workload and patient care

Development and Evaluation of an RN/RPN Utilization Toolkit. An [online article](http://www.cpsinet.org/) that reviews staff mix decision-making based on the College of Nurses of Ontario’s practice standard for the utilization of RNs and RPNs. [English only]
Effect of Work Hours on Adverse Events and Errors in Health Care. A 2010 online article (by Danielle Olds and Sean Clarke) in the Journal of Safety Research. [English only]

**Nurse Fatigue and Patient Safety.** A 2010 research report from CNA and the Registered Nurses’ Association of Ontario. [PDF, 1.22 MB] [English only]

NurseONE.ca Staff Mix knowledge feature that provides an overview of nursing staff mix and links to other resources.

Nurses’ Turnover in Canadian Hospitals. Background PowerPoint for a 2009 nursing turnover study. [PDF, 2.61 MB] [English only]

Nursing Workload and Patient Care web page from CFNU with links to the (Berry and Curry) report examining nursing workload and its impact on patient care.

**Registered Nurse-Sensitive Outcomes: 2014 Summary Report.** An overview of nursing outcomes research from the College of Registered Nurses of Nova Scotia. [PDF, 424 KB] [English only]

**Staff Mix Decision-making Framework for Quality Nursing Care.** This PDF document provides a systematic approach to nursing staff mix decision-making that can be used in all clinical practice settings. [PDF, 597.5 KB] [English only]

Absenteeism and Overtime: Quick Facts 2013 web page from CFNU with links to a fact sheet on RN and nurse supervisor fatigue in Canada’s health care and social assistance sectors. [English only]

**Valuing Patient Safety: Responsible Workforce Design** (CFNU report) [PDF, 1.6 MB] [English only]

**Health-care system challenges**

*All-Cause Readmission to Acute Care and Return to the Emergency Department. A Canadian Institute for Health Information web page that links to their 2012 study.*

Redesigning the Workplace for 21st Century Healthcare. Web page linking to an online article discussing current workplace challenges and the mechanisms to improve quality of care, work environments and system efficiency. [English only]

**Improving nurse staffing and patient outcomes**

*Do Higher Hospital-wide Nurse Staffing Levels Reduce In-hospital Mortality in Elderly Patients with Hip Fractures?* Link to a pilot study showing a correlation between
decreased nurse staffing and mortality among patients admitted for hip fractures. [English only]

Hospital Mortality, Nurse staffing and Education. Web page for an online observational study in nine European countries. [English only]

Nurse staffing and inpatient hospital mortality. A study funded by the Agency for Healthcare Research and Quality that establishes a direct link between RN staffing levels and individual patient experiences. [PDF, 377 KB] [English only]

Quality and Cost Analysis of Nurse Staffing, Discharge Preparation, and Postdischarge Utilization. Link to a 2011 study by Weiss, Yakusheva and Bobay on the impact of unit-level nurse staffing on readmission and emergency department visits. [English only]

Value of Registered Nurses (CNA fact sheet) [PDF, 266 KB] [English only]

Nursing staff mix

Staff Mix Decision-making Framework for Quality Nursing Care. This PDF document provides a systematic approach to nursing staff mix decision-making that can be used in all clinical practice settings. [PDF, 597.5 KB] [English only]

Module 2 References


Module 3
This module offers a range of evidence based tools while showing you how to apply the principles of safe nurse staffing. This module will further describe the components of safe nurse staffing introduced in Module 1 and will demonstrate how to apply its principles using the stories from Module 2. Module 3 will showcase tools for each component and help you identify which are the most appropriate for your situation. The tools offered are examples for various situations or settings, so you will need to choose those most relevant to you. Please note: CFNU and CNA are not recommending any specific tools.

Section 1: Safe Nurse Staffing Components
There are a number of components to consider when implementing evidence-based safe nurse staffing. This section expands on the six components introduced in Module 1.

Real-time Assessments of Patient Needs
Nurse staffing decisions must respond to the health-care needs of the patient and enable the delivery of safe, competent, ethical, quality, evidence-informed care that aligns with professional standards and staff competencies.

Real-time assessments of patient needs are the primary drivers in evidence-based safe nurse staffing decisions.

Assessing patient needs must be done on a real-time, shift-by-shift basis so that, together, nurses and nurse managers can make informed staffing decisions. Staffing decisions should be made by matching the needs of the patient with the educational qualifications, competencies, experience and scope of practice of the nurse. One must also consider factors such as available resources, physical environment and continuity of care.

Nursing Care Delivery Models
A nursing care delivery model is a system for organizing and delivering nursing care to patients and their families. Examples of nursing care delivery models include functional nursing, primary nursing, collaborative nursing practice or team nursing. In this section, we will look at models that enable inter and intraprofessional teamwork.

To find out more about the nursing care delivery model used in your practice setting, talk to your nurse manager or union representative.
In 2011, CNA led a project to achieve consensus on principles to guide decision-making on nursing care delivery models, including the determination of staff mix.

Consider these questions when examining nursing care delivery models:

1. Who is involved in providing nursing care in your unit or practice setting? This could be RNs, LPNs, nurse educators, clinical nurse specialists, nurse practitioners or unregulated health-care providers.

2. Do you have a clear understanding of the educational qualifications for each of these types of providers?

3. Do you have a clear understanding of the scope of practice or scope of employment for each of these types of providers?

4. Do you have a clear understanding of the competencies and role limitations of each of these types of providers?

5. Are there clear job descriptions that reflect the scopes of practice or employment or any role limitations for each of the types of providers in your organization?

6. What other providers are involved in providing or supporting the delivery of interprofessional care? This could include social workers, physiotherapists, pharmacists, respiratory therapists, occupational therapists, physicians and others.

7. Do you have clear understanding of the scope of practice and roles for each of these types of providers within your model of care?

8. What educational support is available for staff?

9. What managerial support is available for staff?

**Staff Mix Decisions**

Staff mix refers to “the combination of different categories of health-care personnel employed for the provision of direct client care in the context of a nursing care delivery model.” (McGillis Hall, 2005, p. 30)

Staff mix decision-making refers to “the act of determining the mix of the different categories of health-care personnel employed for the provision of direct client care.” (Canadian Nurses Association, Canadian Council for Practical Nurse Regulators, Registered Psychiatric Nurses of Canada, 2012, p. 4).

Staff mix decision-making should involve four phases:

- assessment,
• planning,
• implementation, and
• evaluation.

It must also consider patient, staff factors, organizational factors as well as outcome indicators.

**Examples of Patient Factors to Consider:**

• Health-care needs

• **Variability:** the degree to which a client’s condition or situation changes or is likely to change. Considerations include predictability, stability and patterns of change.

• **Predictability:** the extent to which a client’s outcomes and future care requirements can be anticipated.

• **Stability:** the ability to maintain a steady-state equilibrium.

• **Acuity:** the degree of severity of a client’s condition and/or situation.

• **Complexity:** the intricate entanglement of two or more systems (e.g., physiological or emotional states of the body, family dynamics, or environmental interactions with the patient); can be affected by the patient’s physiological makeup or health behaviors; the sum of variables influencing a client’s current health status.

• **Resiliency:** the capacity to return to a restorative level of functioning using compensatory/coping mechanisms (return to baseline); the ability to bounce back quickly after an insult.

• **Vulnerability or risk of negative outcomes:** the level of susceptibility to actual or potential stressors that may adversely affect patient outcomes; can be influenced by the patient’s physiological makeup or health behaviors; the likelihood that a client will experience a negative outcome as a result of a health condition or response to treatment.

• **Resource availability:** the extent of resources (e.g., technical, fiscal, personal, psychological and social) that the patient/family/community bring to the situation.

• **Participation in care:** the extent to which the patient/family engages in aspects of care; can be influenced by educational background, resource availability and cultural background.

• **Participation in Decision-making:** the level of engagement of the patient and family in comprehending the information provided by health-care providers and acting upon this information to execute informed decisions. Patient and family engagement in
clinical decisions can be affected by the patient’s knowledge level, their capacity to make decisions given the insult, cultural background (i.e., beliefs and values) and level of inner strength during a crisis.

- Type of client (i.e., individual, family, group, community/population).
- Continuity of care provider.
- Cohort in terms of numbers, range of conditions and fluctuations in mix.

**Examples of Staff Factors to Consider:**
- RNs, LPNs, NPs, CNSs, unregulated health-care providers in terms of their:
  - Numbers
  - Availability
  - Education
  - Competencies
  - Experience
- Continuity of assignment
- Teamwork and collaboration
- Clinical support and consultation
- Continuity of care

**Examples of Organizational Factors to Consider:**
- Nursing care delivery model
- Physical environment
- Practice setting
- Workplace health and safety
- Policies
- Culture
- Collective agreements
- Leadership support
- Resources and support services
- Legislation and regulations
**Patient Factor Questions to Consider:**

- Who are the patients and what do they need from the team?
- How many patients with conditions that are changing or are likely to change require frequent ongoing monitoring and intervention?
- How many patients have complex care needs characterized or influenced by a range of variables (i.e. multiple medical diagnoses, impaired decision-making, complex family dynamics)?
- How many patients have conditions that are following an expected pathway whose care can be managed through interventions with predictable outcomes?

**Staff Factor Questions to Consider:**

- How does the model of care influence the staff mix?
- Is the number of staff available for the shift consistent with the number usually planned to meet the needs of the patients?
- Does the skill mix of staff (e.g., RNs, LPNs, CTAs) allow for a distribution of work consistent with the scope of practice/employment of the provider and the needs of the patients?
- Do employer policies clearly identify what limits are being imposed on the nurses’ scope of practice?
- Does the experienced-to-novice staff ratio provide the necessary competencies to meet the needs of the patient population?
- Does the profile of staff available for the shift allow for flexibility to respond to patient acuity, complexity, stability, variability and number?
- Are the practice expectations of all health-care providers clearly documented and understood by all?
- Who are the members of the interprofessional team and how does the team collaborate to meet the needs of the patient population?
- What is the availability of the interprofessional team (including medical staff)?
- How do LPNs access RNs for clinical guidance in your setting?
- How do RNs provide clinical guidance to LPNs in your setting?
- What opportunities and mechanisms exist to support interprofessional communication?
Organizational Factor Questions to Consider:

- What is the occupancy rate on the unit (are there empty beds?), and what is its level of activity in relation to pending discharges/anticipated admits/transfers?
- What is the occupancy rate on the site?
- What is the profile of the patients and staffing across units?
- What other resources are available (e.g., ward clerks, ward aides, sitters, porters, lab services and security personnel)?
- Do employer policies clearly identify what limits are being imposed on nurses’ scope of practice?
- How do nurses participate in clinical decision-making in your clinical setting?

Examples of Patient Outcome Indicators to Consider:

- Safety/quality of care such as:
  - Access to a care provider
  - Morbidity
  - Mortality
  - Patient safety incidents
  - Infection rates
  - Falls
  - Readmissions
- Quality of life, functional independence, self-care management
- Satisfaction
- Continuity of care
- Continuity of the care provider

Examples of Staff Outcome Indicators to Consider:

- Quality of work-life such as:
  - Satisfaction
  - Engagement
  - Leadership
  - Professional development
- Optimization of scopes of practice
- Evidence-informed care
- Fatigue
- Work relationships

• Overtime
• Absenteeism
• Illness and injury
• Turnover

Examples of Organizational Outcome Indicators to Consider:
- Evidence-informed practice
- Access
- Safety/quality of care such as:
  - Length of stay/service
  - Patient safety incidents
  - Readmissions
  - Supervisors’ span of control
  - Quality of work environment — retention and recruitment
  - Human resources costs — recruitment and retention
  - Case/service unit cost

Workload Measurement and its Management

Nursing workload is defined as the amount of care allocated to patients based on an assessment of their nursing needs and the care they require.

Nursing workload measurement systems calculate the number of direct, indirect and non-clinical patient care hours by patient acuity on a daily basis. These tools provide a way to collect the specifics of each patient’s care needs and the standard times required to complete the care in relation to the available staff time.

For many years, nursing has struggled to quantify the work of nurses. Existing nursing workload measurement tools are unable to capture more than 40% of the nursing work in some settings. While the tools have been helpful in identifying tasks performed by nurses, most have not been able to capture the cognitive or intellectual aspects of
the role such as coordination, facilitation and decision-making. Workload measurement tools are by no means a complete solution to determine evidence-based safe staffing. (International Council of Nurses, 2006, p. 16).

Six commonly used workload methodologies include:

- Professional judgment approach
- Nurses-per-occupied-bed method
- Acuity-quality method
- Timed-task/activity approach, including PRN, GRASP and Medicus
- Regression-based systems
- Nurse-to-patient ratios

Professional responsibility is part of workload measurement and its management. Most nursing collective agreements provide a problem-solving process for nurses to identify workload and practice concerns as they relate to patient care. Provincial professional responsibility forms from nursing unions provide a mechanism to report unsafe practices, such as excessive workload or inappropriate staff mix. Your organization may have information on this process.

**Quality Practice Environments**

Quality practice environments support the delivery of safe, compassionate, competent and ethical care. They support the health of patients and nurses. In quality practice environments, patients and their health-care needs are at the centre of care and decision-making.

CNA and CFNU believe:

- that quality practice environments are essential in all domains of nursing practice across the continuum of care.
- that nurses and employers have an obligation to their clients to advocate for and contribute to quality practice environments that have the organizational structures and resources necessary to promote safety, support and respect for all people in the practice setting.
- that it is unacceptable to work in, receive care in, govern, manage or fund unhealthy health-care workplaces.
- and that a safe and healthy practice environment is a fundamental human right.
Developing, supporting and maintaining quality practice environments takes time and commitment. It is a responsibility shared by individual nurses, employers, regulatory bodies, professional associations, educational institutions, unions, health services delivery and accreditation organizations, governments and the public.

Workplaces are subject to provincial and territorial health and safety legislation. “Occupational safety and health is an area concerned with protecting the safety, health and welfare of people engaged in work or employment.” (WorkBC, 2015, para. 11) Occupational health and safety programs “foster a safe and healthy work environment” and are one component of a quality practice environment.

Research shows that unhealthy practice environments and inadequate nurse staffing can lead to workplace violence and bullying. Violence and bullying negatively affect outcomes for clients, nurses and organizations. CNA and CFNU strongly support violence-free workplaces.

Retention and Recruitment

Nursing managers and organizations must consider both retention and recruitment strategies if their organizational human resources plan is to be long term, successful and proactive.

A combined retention and recruitment strategy is also highly valuable because it directly impacts patient care. Organizations that are able to retain their staff have better evaluations of the quality of care that is provided.

Retention Strategies

The ability to retain staff members and reduce the turnover rate is an essential characteristic of a successful long-term HR plan for any organization. High staff turnover rates can negatively affect patient care outcomes, staff morale, work productivity, costs to fill positions and efforts to hire and orient future staff.

Unit/Service-level Retention Strategies to Consider (from the Mount Sinai toolkit)

- “Holding regular staff meetings
- Following up on concerns and ensuring resolution
- Providing positive recognition
- Adopting recognition and reward programs
- Supporting nurses with education
- Having the right equipment available
• Being transparent with communication to the staff
• Creating innovative scheduling opportunities” (p. 83)

Nurse Manager Retention Strategy Checklist (from the Mount Sinai toolkit)
• “Does your organization conduct regular employee satisfaction surveys?
  o What are the main issues identified by your staff?
  o Have you worked with them to develop an action plan to address these issues?
• Does your organization have a nursing and/or interprofessional practice model?
  o What mechanisms are available to nurses to ensure that they have input into their practice?
  o How do you support staff-nurse involvement in professional practice issues?
• Does your organization have employee wellness initiatives?
  o How are staff members made aware of these initiatives?
• Does your organization have employee recognition programs?
  o How are staff recognized at the unit level?
• Does your organization provide scholarships, bursaries or special awards recognizing nursing excellence?
  o Do you regularly promote and encourage staff to apply to these programs?
• Does your organization have programs in place to support front-line staff nurses working in 80:20 initiatives?
• Have you actively supported and recruited nurses to participate in these initiatives?
• Do you make available and regularly review staff moving into front-line leadership roles as receptor, committee membership, team leader a[cut off] charge nurse.
• How are staff mentored and supported to develop their leadership skills?” (p. 85).

Much of the literature suggests that a successful retention plan requires targeting different demographics in ways unique to their needs. To be able to retain nursing staff, nurse managers need to understand the values and needs of their team members.

The current nursing workforce is made up of staff and nursing leaders from 4 different generations:
• Veterans, born between 1925 and 1945;
• Baby Boomers, born between 1946 and 1964;
• Generation X, born between 1963 and 1980; and

Recruitment Strategies

When deciding which recruitment strategies to pursue, a nurse manager or nurse recruitment team should consider the urgency, the financial, technological and human resources available, the skill mix and time.

Knowing about effective ways to recruit allows nursing managers to advocate for improved recruitment strategies in their organizations. Examples from the Mount Sinai Toolkit include:

• “Adopt the appropriate technology”
  o “Use in-house electronic recruiting systems. This allows position openings to be put on hospital websites and national job posting boards.
  o Respond electronically to candidates. Create an electronic response system that eliminates ‘paper recruiting’ (e.g., printed letters, “snail” mail, postage, unwanted phone calls, etc.).
  o This may also reduce costs and quicken response times for the administrative team” (p. 71).

• “Create candidate pipelines”
  o “Instead of seeing recruitment as only a short-term activity, pay attention simultaneously to both the immediate and longer term picture. Examples could include: job fairs, volunteer or student intern opportunities, and/or scholarships or stipends for nurses that provide longer term commitments” (p. 71).

• “Create employee development programs”
  o “Job enrichment and developmental opportunities
  o Mentoring programs
  o Universal hospital courses
  o Flexible scheduling” (p. 71).

• “Foster employee referral programs, networking and recruitment campaigns”
  o “This is a cost-effective alternative to the very costly newspaper advertisement. Employees who recruit others to work at the hospital are given a bonus to acknowledge their recruiting efforts. Some hospitals have demonstrated that their employees are their single largest recruitment source.”
Keep in touch with former employees who have left your organization, but who could potentially come back.

Differentiate your organization from the rest by creating a recruitment campaign that highlights what you have to offer your employees, emphasizing unique benefits or characteristics.

Make applying to your organization a welcoming and hassle-free experience by upgrading the appearance of your HR department.

- “Provide financial incentives”
  - “Provide scholarships and loan programs for high school students who want to pursue nursing programs.
  - Provide 'traditional' benefits, such as sign-on bonuses” (p. 72).

- “Support nursing manager-led recruitment”
  - “Although it may be difficult for nursing managers to find the time to do so, it is found that nursing managers who participate in recruitment activities are likely to see improvements in the quantity and quality of candidates who apply for positions. Having nursing managers involved in the recruitment process means that potential candidates may have a better chance at having their questions about the position answered immediately; candidates may also feel more connected and more motivated to apply for a position. Some organizations/nursing managers offer on-site screening interviews that ultimately shorten the process between application and first contact” (p. 72).

Section 2: Where to Find Tools

Nurses can find tools to support evidence-based safe nurse staffing in a number of places, such as from:

- professional associations,
- unions,
- regulatory bodies,
- governments,
- employers, or
- quality institutes/organizations.

Below is a list of tools for you to consider:
Real-Time Assessments of Patient Needs


Workload Measurement and its Management

Nursing Workload and its Management


Hospital Baseline Emergency Staffing Tool (BEST), a web-based resource from the Royal College of Nursing Emergency Care Association and Faculty of Emergency Nursing GONE


Nursing Dashboard Project at Hamilton Health Sciences available at http://www.longwoods.com/content/22801

Nursing Workload — A Priority for Healthcare, an online Academy of Canadian Executive Nurses position statement available at http://www.longwoods.com/content/16266


Workload Indicators of Staffing Need by the World Health Organization available at http://www.who.int/hrh/resources/wisn_user_manual/en/


Professional Responsibility Concerns:
British Columbia Nurses’ Union available at https://www.bcnu.org/a-safe-workplace/defend-your-professional-practice/professional-responsibility-form-process

United Nurses of Alberta available at https://www.una.ab.ca/files/383/ProfessionalResponsibilityConcernFillableForm.pdf

Saskatchewan Union of Nurses available at http://sun-nurses.sk.ca/professional-practice/professional-practice

Ontario Nurses’ Association available at http://www.ona.org/professional_practice/professional_responsibility_workload_report_forms.html


Staff Mix Decisions
AACN Synergy Model for Patient Care available at http://www.aacn.org/wd/certifications/docs/synergymodelforpatientcare.pdf

Building Capacity in Nursing Human Resource Planning: A Best Practice Resource for Nursing Managers from the Mount Sinai Hospital (Toronto) available at http://www.mountsinai.on.ca/nursing/building-capacity

Effective Utilization of RNs and LPNs in a Collaborative Practice Environment, guidelines from the College of Registered Nurses of Nova Scotia and the College of Licensed Practical Nurses of Nova Scotia available at
Evidence-based Safe Nurse Staffing Toolkit: Accessible content


Patient Care Needs Assessment Tool – Appendix A in the Sunnybrook Hospital (Toronto) RN/RPN Utilization Toolkit available at http://sunnybrook.ca/uploads/RN_RPN_Utilization_Toolkit_%28Apr30%29.pdf

RN and RPN Practice: The Client, the Nurse and the Environment, a practice guideline from the College of Nurses of Ontario available at http://www.cno.org/globalassets/docs/prac/41062.pdf

Safer Health Care Nursing Tool, endorsed by the National Institute for Health and Care Excellence (UK) available at http://shelfordgroup.org/library/documents/130719_Shelford_Safer_Nursing_FINAL.pdf

Staff Mix Decision-making Framework for Quality Nursing Care by the Canadian Nurses Association, the Canadian Council for Practical Nurse Regulators and the Registered Psychiatric Nurses of Canada available at https://cna-aic.ca/~media/cna/page-content/pdf-en/staff_mix_framework_2012_e.pdf


Nursing Care Delivery Models

Health PEI: Collaborative Model of Care available at http://www.healthpei.ca/cmoc


Retention and Recruitment Tools

Building Capacity in Nursing Human Resource Planning: A Best Practice Resource for Nursing Managers from the Mount Sinai Hospital (Toronto) available at http://www.mountsinai.on.ca/nursing/building-capacity


Quality Practice Environment (including occupational health and safety)


Health and Safety Smart Planner: Economic Evaluation Software available at http://www.iwh.on.ca.smart-planner


Practice Environments: Maximizing Outcomes For Clients, Nurses and Organizations, a CNA and CFNU position statement available at http://cna-aiic.ca/~media/cna/page-
Preventing and Managing Violence in the Workplace available at http://rnao.ca/bpg/guidelines/preventing-and-managing-violence-workplace


Section 3: Choosing Tools

You’ve now seen a number of examples of different tools and know where to find them. You must now understand the elements to consider when choosing tools for safe nurse staffing.

This checklist provides a sample of questions to assist you.

- Is the tool valid (content and face, construct and criterion)?
- Does the tool have strong inter-rater reliability?
- Is the tool current (validated within the past year)?
- Is the tool easy to understand and use?
- Is the tool appropriate to your clinical setting/service?
- Is the format of the tool (paper vs. electronic) conducive to its completion?
- Were nurses involved in the development and evaluation of the tool?
- Does the tool capture all elements of nursing practice, not just tasks?
- Is the data required to populate the tool readily available and accurate/valid?
- Does the tool address patient, nurse and organizational factors as well as outcome indicators?
- Does the tool include reliance on professional nursing judgment?
- Is the tool flexible enough to allow for real time needs?
Section 4: Apply the Principles of Evidence-based Safe Nurse Staffing

In this section, we will review stories from Module 2 that show how adverse patient, nurse and employer outcomes can result from the absence of evidence-based safe nurse staffing. This time the solutions are included demonstrating how the nurses applied the 5 principles of safe nurse staffing to arrive at better outcomes for patients, nurses and employers. As you read them consider how the principles of safe nurse staffing have been applied to the solution.

Scenario Solutions

Scenario #1:

*Health-care Setting: Nursing Home*

After trying to resolve the situation directly by talking to my employer, I filed a professional responsibility concern form and the union rep came in and reviewed the details. It took a while, but we reached a settlement for more staffing. Not just nurses, but also support staff like a ward clerk so staff nurses can spend more of our time actually caring for our patients. We also got a new staffing model, which means we have better nursing leadership. We hold staff meetings regularly now, and we talk about our problems and work on solutions. Schedules are reviewed prior to posting to make sure they work for the patients. So, there’s better communication throughout the whole organization. Now, I can plan ahead. I can do my job better now because other supports are in place within the nursing home. I feel that I am able to provide the safe quality care that my patients need, and that’s a huge relief.

Scenario #2:

*Health-care Setting: Acute Care Hospital Endoscopy Unit*

I approached my manager, but it soon became clear we couldn’t resolve the issues internally. So I filed a professional responsibility concern form, and the union rep came in and talked to everyone about the situation. Because of the OR standards for care in the Endo unit, it was clear we needed to have anesthesia coverage for all off-hour Endo procedures or to have a second RN there — a staffing toolkit ensured this was always the case. Existing and all future OR nurses also get training in Endo procedures and conscious sedation, and now we rotate regularly through the Endo unit so we can use the training. There are also some new policies and procedures to ensure we are all on the same page communication-wise. I’m so glad I acted and that now I can do my job
well and my patients are safe. If something had happened on my watch, I would never have forgiven myself.

Scenario #3:

**Health-care Setting: Acute Care Hospital Medical Unit**

Initially, I did try to resolve the issue with my manager, but the situation was so complex that changes were needed throughout the organization if things were going to improve. So, I wrote out a detailed professional responsibility concern form and the union’s professional practice officer came out to see what was happening. It wasn’t easy to work it out. It took two years to reach a settlement, and a lot of meetings, but it was worth it. We got more core nurse staffing — another RN and LPN — dedicated relief staff, and extended hours for some non-nursing staff. Like ward clerks, porters, and pharmacists. We got some more training, and so did the managers so that they could understand the issues better. Nurses now feel more involved in planning and decision-making. There’s been changes throughout the hospital. Some new tools, and everyone — managers, directors and all the staff — are beginning to realize what nurses have known all along. The bottom line in hospitals is patient safety — first and foremost. When you have enough nurses, and they have the tools, resources and supports in place to do their jobs, patients get better faster, and the whole health-care system is better off.

Scenario #4:

**Health-care Setting: Post-Acute Care Unit (Geriatric treatment/assessment, complex continuing care, alternate level of care)**

The nurses on the unit filed professional responsibility concern forms, and when a settlement couldn’t be reached, it went to an expert panel for assessment. The panel made 50 recommendations. It concluded that patient care and outcomes were suffering under the model of care. The panel said the workloads were too heavy and that the environment we were working in wasn’t supportive. It was so nice to have our concerns recognized and affirmed by an objective panel of experts. What they suggested we needed was better leadership and a focus on determining what different nurses could and should do given our education, experience, knowledge and competencies. From this, they said we could figure out what staff mix we needed. At the minimum, they said, we needed sufficient core staffing to care for our patients, meaning balancing regulated and unregulated care teams. What we got in practice was more RNs and LPNs, more full-time staffing, so there’s enough RNs on site, and now we use fewer agency nurses. RNs are now directly involved as clinical leaders of the team. There’s an advanced practice nurse and a new safe staffing model, which clearly delineates what RNs, LPNs
and unregulated care providers can and should do. I expect we'll see fewer falls and medication errors on the unit and better patient outcomes. Because nurses are now respected as key decision-makers, we are working better as a team, and we have sufficient core staffing for continuity of care.

Scenario #5:

Health-care Setting: Emergency Department

The nurses on the unit filed professional responsibility concern forms, and when a settlement couldn't be reached, it went to an expert panel for assessment. The panel made over 50 recommendations. The majority were on staffing and scheduling. The big problem was that even if we had a schedule posted, there was a big discrepancy between the planned and actual staffing in the ER. If there was an emergency, we couldn't cope. We could barely manage the day to day. So, adequate core staffing needed to be in place first. Then, the ER staff and management got together to create guidelines so that we would have surge staffing in place if the volume increased suddenly. We also now use a forecasting tool to evaluate whether we have enough full and part-time RNs and LPNs in the ED. Vacation, stats, mat leave, and sick time all need to be accounted for in both short- and long-term planning. We had policies to help us decide whether an RN or LPN was needed. But now we are actually trained in them so roles and accountabilities are clearer. We are tracking how this affects clients. The charge nurse role was also enhanced and training provided. Now the charge nurse, operation and clinical manager meet regularly which has improved communications overall.

Scenario #6 Nurse Manager

Health-care Setting: ICU

I met with my staff and told them about the indicator results. I asked them what they thought the problem might be. Many said there were several sick calls every day. They said we didn’t have enough relief staff, so nurses were doing lots of overtime. Because we were overusing existing staff resources, we had created an unhealthy cycle of overtime. Overtime led to nurse fatigue, which led to more sick days and the need for more overtime. Sometimes, we were even short-staffed on shifts when no one could cover. Those days were linked to negative quality indicators. Based on the data and what I heard from my staff, I made the case to our director of nursing for increased core staffing as well as more part time and casual nurses based on the potential savings from reduced overtime, reduced sick time, improvements in the quality care indicators, better patient outcomes and a healthier work environment.
Scenario #6 Nurse Manager

**Health-care Setting: LTC**

I met with the team leaders to look at the staff mix. Who did we have on staff, what were they doing, and were they doing the right things given their education, their competencies and their experience? Did the existing staff mix match the patients’ needs? To determine this, we used a staff mix decision-making framework. The first step was to assess the clients’ needs. All direct care staff were involved in doing assessments, which looked at things like a patient’s dependence, availability supports, stability and the complexity of their condition. Then, we looked at the number of care providers, and whether they were RNs, LPNs or unregulated care providers. What were they educated to do? What were their competencies? Their experience? Based on our patient assessments, we reduced the number of RN positions by five per cent, halved the number of LPNs and added 40 per cent more UCPs. There were no layoffs. Just attrition. We provided organizational supports and training during the transition. After six months, patient outcomes were the same and staff satisfaction was enhanced, as evidenced by greater retention and lower absenteeism rates, which was also a net benefit for the employer and the entire organization.

**Section 5: Test your Knowledge**

**Questions**

**True or False?**

1. The 6 components of safe nurse staffing are: real-time assessments of patient needs, nursing care delivery models, staff mix decisions, workload measurement and its management, quality practice environment, retention and recruitment.

2. Retention checklists are an effective way to ensure an HR long-term planning process is in place.

3. Selecting a tool that’s been proven to work in the past is what matters.

4. Developing and sustaining quality practice environments is the sole responsibility of employers.

5. Provincial professional responsibility concern forms are part of the workload measurement and its management component.

6. Staff mix is the combination of different categories of health-care personnel employed for the provision of direct client care in the context of a nursing care delivery model.
7. Nursing satisfaction is the primary driver in evidence-based safe nurse staffing.

8. The staff mix decision-making process involves only three steps: planning, implementation and evaluation?

9. Some tools combine components such as staff mix and staffing levels and workload.

**Answers**

1. True
2. True
3. False
4. False
5. True
6. True
7. False
8. False
9. True

**Conclusion**

You have now learned about the components to consider and tools available to you to implement evidence-based safe nurse staffing in your organization.


Visit [http://cna.fluidsurveys.com/s/staffingtoolkitmodule3/](http://cna.fluidsurveys.com/s/staffingtoolkitmodule3/) to complete a short survey so we can continue to improve this toolkit.

**Module 3 References**

**References**


Module 4

Welcome to Module 4 of the Evidence-based Safe Nurse Staffing Toolkit. This module will show you how to implement safe nurse staffing in your practice environment.

Evidence-based safe nurse staffing can produce real changes that benefit patients, nurses and employers, such as:

- Improved staffing models
- More core nurse staffing with dedicated relief staff
- Enhanced charge nurse roles with additional training
- Development of surge staffing guidelines
- Decreased nurse absenteeism and overtime

But how do you get from having an evidence based solution to communicating that solution to those who can make the decision to implement it? This module introduces tools you can use to present your case for evidence-based safe nurse staffing in your practice environment.

Section 1: What is a Business Case?

What is a business case? A business case outlines how an investment of resources, be they financial, human or otherwise, is justified based on the potential return on that investment. A business case is used to capture the reasoning for initiating a change in a practice, policy, project or task in response to an issue. There are many different templates available to create a business case. No matter which one you chose, your business case should include:

- an executive summary that presents a succinct overview of the issue, the options for addressing it, the rationale, and recommendations,
- the current context, including the issue(s) to be addressed. This can include assumptions, constraints, dependencies, scope and boundaries,
- the various options available, including the status quo,
- a cost/benefit analysis of the options, including direct and indirect costs and benefits to patients, providers and employers. If you don’t have the numbers already, ask your manager to provide this information to you,
- your recommendation should also include the “who” and the “how,” such as governance, management and implementation. Describe potential risks and risk management plans. What are you willing to do to be part of the solution? Don’t leave
it all to management — show that you know what needs to be done and are willing to put in the work,

- scientific evidence that supports your recommendation,
- a list of key stakeholders and where they stand on your recommendation, and
- a proposed implementation and evaluation plan.

Examples of business cases and an interesting article:


**Section 2: What is a Briefing Note?**

In general, if the solution or recommendation is going to be complex, involved and have significant costs, a formal business case is likely needed. But if the recommendation is relatively easy to adopt and/or can be managed or implemented by the unit, a briefing note may be more appropriate.

Although there are many different templates available, briefing notes often follow a standard format with five main parts:

- the stated purpose,
- the background,
- a review of the current situation,
- a summary of the key considerations — the pros and cons — that provide evidence and a rationale that supports the final section, and
- the conclusion, which may be a recommendation, other advice, or both.

### Section 3: Presenting Your Business Case

Now that you know some of the basic differences between a business case and a briefing note, let’s discuss how you can get ready to present your case. To do so, we’ll go over the questions you’ll need to answer to know if you’re truly ready, discuss common concerns and how to address them, and help you create an elevator pitch, sometimes called the 30-second pitch.

If you can answer “yes” to all of these questions, you’re probably ready to present your case:

1. Are my analyses and recommendations clear and supported by evidence? 
   Reviewing your executive summary should give you the answer to this question.
2. Do I have a clear understanding of the evidence? A clear understanding of the evidence is key to being able to answer any questions.
3. Are the costs and potential savings clear, reasonable and achievable?; for instance, from retention and recruitment, reduced turnover or reduced adverse events?
4. Have I included an implementation plan?
5. Have I included a way to evaluate outcomes and measure success?
6. Do I know who needs to receive my business case or briefing note?
7. Do I have my elevator pitch ready? [>]

### Section 4: Common Concerns and How to Address Them

Preparing and presenting a business case or briefing note can be a new experience for many nurses. You may have concerns. Here is a list of common concerns and guidance on how to address them.

*I’m just a junior nurse. Shouldn’t this come from my nurse manager?*

Everyone is responsible for safe staffing, and sometimes a new perspective on a situation is what’s needed to be able to push for change. It’s recommended that you consult or collaborate with other nurses in your unit in this activity, as well as with your nurse manager, union representative, HR staff and professional practice leader.
What if the technology and implementation costs are too high?

A clear cost-benefit analysis should include an explanation of how costs will be incurred over time, rather than in one lump sum. This concept is called amortization.

How can I overcome lack of interest or lack of capacity?

Solid evidence is hard to ignore, but having a leadership champion is always helpful. This person is typically in a formal leadership position and is supportive of your recommended change. If there is currently limited capacity for implementation, include a training plan to build capacity.

How do I get access to my manager?

Request time in writing and officially book at meeting. Also, make sure you know their preferred way of receiving this type of information. For example, should you e-mail a copy of the business case or briefing note prior to the meeting? Or do you just need to bring hard copies with you? Perhaps they prefer a PowerPoint presentation. It is important that you follow the regular chain of command, starting with your immediate nurse manager or clinical leader.

What if I’m not comfortable presenting my case?

CNA and your provincial or territorial nursing union have various resources to help you become a more confident communicator. And of course, review your materials and practice, practice, practice.

What if my recommendation isn’t accepted and doesn’t move forward?

There are many reasons why some proposals don’t move forward. It doesn’t necessarily mean that the case wasn’t sound. If your recommendation doesn’t move forward, it doesn’t mean you should stop trying. Inquire as to why your proposal wasn’t accepted and address that issue if possible.

Section 5: What’s Your Elevator Pitch?

The business case or briefing note is ready. You have all your stakeholders behind you, and now you need to be able to speak succinctly about your idea. There is so much to say, yet how do you say it to sell it? The Harvard Business School has created a tool to help with this: the Harvard Business School Elevator Pitch Builder.
Let's use this tool to build a pitch based on the idea for building a “quiet room” on the floor.

**Step 1:** Who. Introduce and describe yourself. For example: “Hello, my name is Mary, and I have been with the organization for over 10 years.”

**Step 2:** What. Describe your role. For example: “I am a nurse manager and, as part of my role, I am responsible for the safety of our nurses and patients.”

**Step 3:** Why. Introduce the business case and why it is unique, innovative or necessary. For example, “I have noticed changes across the organization to our patient flow and hours of work. I understand there are many facets to the issues, so I would like to discuss an easy opportunity to improve the safety of our nurses and patients.”

**Step 4:** Goal. That’s the pitch and the ask. For example: “There is an unused utility room that, with a small investment, can be reconfigured to become a quiet room. This room can be a quiet place where nurses, patients and even families can go to escape the busyness of the unit.”

Now you try your idea. When you are complete read it out loud to see how it sounds.

**Section 6: Test Your Knowledge**

Now it’s time to test your knowledge of what you’ve learned in this module.

**Question**

Match the terms to the definitions

**Terms**

Executive summary
Evaluation plan
Business case
Cost/benefit analysis
Briefing note
Recommendation
Definitions

Presents a succinct overview of alternatives and recommendations of your business case

A detailed breakdown of the direct and indirect costs and benefits to patients, providers and employers

What you believe should be done, based on sound scientific evidence and analysis of your specific environment

How you will measure the success of your recommendation

A way to present your ideas and evidence to decision-makers that outlines how an investment of resources is justified based on the potential return on that investment

A way to present your ideas and evidence when the solution doesn’t require significant resources (includes a purpose, summary of the facts and a concluding recommendation)

Answers

1a, 2d, 3f, 4b, 5c, 6e

Conclusion

Thank you for putting your patients first by completing the fourth and final module on evidence-based safe nurse staffing. You’ve learned about the importance of building a case to influence decision-making on this important topic.


Visit [http://cna.fluidsurveys.com/s/staffingtoolkitmodule4/](http://cna.fluidsurveys.com/s/staffingtoolkitmodule4/) to complete a short survey so we can continue to improve this toolkit.

Module 4 Resources


